

Appl. No.: 09/744,001  
Group Art Unit: 1625

### REMARKS

Claims 11-24 are currently pending in the instant application.

In Paper No. 10, the Examiner rejects claims 11, 14 and 16 under 35 U.S.C. §112, first paragraph, as lacking enablement. Specifically, the Examiner contends that while the Specification provides enablement "for a carboxylic acid ester, such as an ester of a C<sub>6-22</sub> carboxylic acid and C<sub>1-22</sub> monoalcohols or a polyol having from 2 to 6 hydroxyl groups and 2 to 32 carbon atoms, [it] does not reasonably provide enablement for all the carboxylic acid esters." (See, Paper No. 10, p. 2). The Examiner also contends that while the Specification is enabling for alkylene oxides, such as ethylene oxide, propylene oxide, and butylene oxide, that it does not provide enablement for all alkylene oxides. (See, *id.*). Additionally, the Examiner contends that the Specification while being enabling for some alcoholates, is not enabling for all alcoholates. Finally, the Examiner contends that while the Specification is enabling for some carboxylates, such as those of monobasic acids having from 1 to 22 carbon atoms, that the Specification does not provide enablement for all carboxylates. On these bases, the Examiner rejects claims 11, 14 and 16 as lacking enablement.

Applicants respectfully traverse the Examiner's rejection, and the arguments and contentions in support thereof. Applicants respectfully submit that all pending claims satisfy the requirements of 35 U.S.C. §112, first paragraph, for the following reasons.

As set forth in the Manual of Patent Examining Procedure, the "enablement requirement" refers to the requirement of 35 U.S.C. §112, first paragraph, that the Specification describe how to make and how to use an invention. (See, M.P.E.P. §2164). In determining whether a Specification contains an enabling description, the M.P.E.P. provides further explanation, as follows:

[Such a determination must ask] whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or

Appl. No.: 09/744,001  
Group Art Unit: 1625

unreasonable? That standard is still the one to be applied. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). (M.P.E.P. §2164.01, (*emphasis added*)).

The M.P.E.P. also specifically notes that, "applicant need not describe all actual embodiments." (See, M.P.E.P. §2164.02). The existence of working examples is just one of many factors to be considered in determining whether undue experimentation is necessary to make and use the claimed invention.

Applicants submit that the instant Specification contains sufficient information to enable one skilled in the art to make and use the claimed invention.

To begin with, Applicants' claimed invention is directed to a process for producing alkoxylated carboxylic acid esters, wherein the process comprises reacting a carboxylic acid ester with an alkylene oxide having from 2 to 4 carbon atoms in the presence of a catalyst mixture comprised of a sodium salt and a potassium salt selected from the group consisting of hydroxides, oxides, carbonates, alcoholates and carboxylates, wherein the weight ratio of the sodium salt to the potassium salt is from 20:1 to 1:20.

Accordingly, satisfaction of the enablement requirement is achieved by providing sufficient information to enable one skilled in the art to make and use the claimed process, *i.e.*, enabling one skilled in the art to practice the claimed process, without undue experimentation.

The Examiner has argued that only certain carboxylic acid esters are enabled, that only certain alkylene oxides are enabled, that only certain alcoholates are enabled, and that only certain carboxylates are enabled. Applicants submit that the Examiner is incorrect and has misinterpreted the enablement requirement of the law. It may well be that only several of the many existing carboxylic acid esters are specifically exemplified. However, this in no way limits the enablement provided by the Specification to those compounds specifically listed.

Applicants' Specification contains information which describes carboxylic acid esters which are suitable for use in the claimed process. Beginning at page 3, line 13, of the Specification, carboxylic acid esters suitable for use in the claimed process are described broadly, as "esters of carboxylic acids with monoalcohols or . . . polyols." (See, Applicants' Spec., p. 3, lines 14-16). Applicants' Specification also points out that preferred carboxylic acids useful in the disclosed esters include C<sub>6-22</sub> carboxylic acids. (See, *id.*, at lines 16-17).

Appl. No.: 09/744,001  
Group Art Unit: 1625

Furthermore, specific examples of preferred carboxylic acids along with examples of preferred alcohols are provided in the Specification.

One of ordinary skill in the art is likely to be a person with a chemistry or chemical engineering degree who is familiar with process technology. One of ordinary skill in the art, upon reading Applicants' Specification and being apprised of the variety of carboxylic acid esters that are disclosed as suitable for use in the claimed process, would be able to select any of such carboxylic acid esters and use them in the process as disclosed and exemplified. For one of ordinary skill in the art to substitute another carboxylic acid ester for the specifically exemplified lauric acid methyl ester set forth in the working example, no undue experimentation would be required. The process of the invention is well described in relation to the generic reactants.

Similarly, the Specification discloses a variety of alkylene oxides and mixtures thereof which may be employed in the claimed process. (See, Applicants' Spec., p. 4, lines 15-18). The alkylene oxides specifically disclosed are ethylene oxide, propylene oxide, and/or butylene oxide. The alkoxylation reaction is described completely in the Specification, including the example. Throughout the description of the process in the Specification, the alkoxylation refers to "the alkylene oxide," not a specific compound. Upon reading the Specification, one of ordinary skill in the art would understand how to use a variety of alkylene oxides in the claimed process. No undue experimentation would be required to determine which alkylene oxides are preferred. Moreover, Applicants' Specification already notes that ethylene oxide is preferred.

Finally, in describing the catalysts, Applicants' Specification broadly discloses the use of sodium and potassium compounds such as, *inter alia*, alcoholates and carboxylates. The fact that specific alcoholates and carboxylates are exemplified verbatim in the Specification does not mean that other alcoholates and carboxylates lack enablement. One of ordinary skill in the art, upon reading the Specification and ascertaining that sodium/potassium alcoholates are suitable catalyst compounds, would recognize that any alcoholate or carboxylate which can be obtained or synthesized may be employed in the claimed process and no undue experimentation would be required to determine the viability of such a catalytic compound given the description of the entire process provided in the Specification.

Appl. No.: 09/744,001  
Group Art Unit: 1625

Applicants respectfully submit that all pending claims are fully enabled. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph are respectfully requested.

In Paper No. 10, the Examiner rejects claim 23 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim that which Applicants regard as their invention. Specifically, the Examiner contends that the term "autogenous pressure" is vague and indefinite. Applicants traverse the Examiner's rejection and the contentions in support thereof for the following reasons.

"Autogenous" is an ordinary word in the English language which is often used in the description of chemical processes. Webster's Dictionary defines "autogenous" as, "self-generated; produced independently of external aid; endogenous." (*See, Webster's New International Dictionary of the English Language, 2<sup>nd</sup> Ed, p. 187, Merriam-Webster Publishing, Springfield, Mass (1941) (a copy of which is attached for the Examiner's convenience).* As used in conjunction with the word "pressure", autogenous refers to the pressure created by the reaction itself, without external forces altering the pressure.

One of ordinary skill in the art, upon reading the Specification would understand the phrase "autogenous pressure" in claim 23 as referring to the pressure created by the reaction itself without added pressure.

Accordingly, Applicants submit that the claims are clear and that the requirements of 35 U.S.C. §112, second paragraph are satisfied. Reconsideration and withdrawal of the rejection under §112, second paragraph are respectfully requested.

In Paper No. 10, the Examiner rejects claims 11-24 under 35 U.S.C. §103(a), as being unpatentable over European Patent Publication No. EP 0335295 A2 of Scholz, *et al.* (hereinafter referred to as "EP '295")(also referred to as "Quack" by the Examiner). Specifically, the Examiner contends that EP '295 discloses the preparation of alkylene glycol ethers by reacting a carboxylic acid with ethylene oxide at temperatures of from 100°C to 200°C in the presence of a hydroxide, oxide or alcoholate of an alkali metal or alkaline earth metal catalyst. The Examiner contends that the reaction is conducted in a molar ratio of ester to alkylene oxide of 1:5-25 with from 0.05 to 5% by weight of the catalyst. The Examiner

Appl. No.: 09/744,001

Group Art Unit: 1625

acknowledges that EP '295 fails to disclose the claimed ratio of sodium salt to potassium salt. The Examiner argues that the differences between the claimed invention and the prior art amount to routine optimization within the skill level of one of ordinary skill in the art.

Applicants strenuously traverse the Examiner's rejection, along with the contentions and arguments in support thereof for the following reasons.

It is well-settled that in order to establish a *prima facie* case of obviousness based upon a single reference, and thus shift the burden of proving non-obviousness onto Applicants, the Examiner **MUST** satisfy each of the following three criteria: (1) the reference must contain a teaching or suggestion which would motivate one of ordinary skill in the art to modify the reference as suggested by the Examiner (it is not sufficient to say that the reference can be modified without a teaching in the cited reference to suggest the desirability of such a modification); (2) there must be a reasonable expectation of success; and (3) the reference must teach or suggest each and every element of Applicants' claimed invention. The teaching or suggestion to modify the cited art and the reasonable expectation of success must both be found in the prior art and not in Applicants' Specification. (M.P.E.P. §2143).

Additionally, obviousness arguments based upon "routine optimization" rationales are applicable only where the claimed subject matter is *encompassed* by the prior art. (See, M.P.E.P. §2144.05 II(A)). Moreover, "routine optimization" requires the identification of a result-effective variable. "A particular parameter must first be recognized as a result-effective variable, *i.e.*, a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." (See, M.P.E.P. §2144.05 II(B) *citing In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)).

Again, as noted above, Applicants' claimed invention is directed to a process for producing alkoxyated carboxylic acid esters, wherein the process comprises reacting a carboxylic acid ester with an alkylene oxide having from 2 to 4 carbon atoms in the presence of a catalyst mixture comprised of a sodium salt and a potassium salt selected from the group consisting of hydroxides, oxides, carbonates, alcoholates and carboxylates, wherein the weight ratio of the sodium salt to the potassium salt is from 20:1 to 1:20.

Appl. No.: 09/744,001

Group Art Unit: 1625

EP '295 is directed to the reaction of a carboxylate with an alkylene oxide using an alkali or alkaline earth metal hydroxide or alcoholate as a catalyst. EP '295 does not teach or suggest the use of mixtures of alkali metal compounds as catalysts. EP '295 does not teach or suggest the use of mixtures of sodium and potassium compounds as catalysts. Additionally, as the Examiner has already acknowledged, EP '295 fails to teach the claimed ratio of sodium compound to potassium compound. EP '295 sets forth seven examples (*i.e.*, "Beispiele"). In each of the examples, a single alkali or alkaline earth metal is employed as the catalytic compound. In each example a single compound, specifically either a barium compound, a sodium compound OR a potassium compound is used. Nowhere is a mixture of a sodium compound and a potassium compound employed.

Moreover, EP '295 contains no teachings which would suggest to one of ordinary skill in the art that the addition of multiple different catalysts would be desirable. Accordingly, it is unreasonable to say that the reference suggests the desirability of the modification which would be necessary to arrive at the claimed invention. Moreover, there is no indication as to any ratio of multiple alkali catalysts as there is no teaching of mixtures of catalytic compounds.

Applicants submit that it is unreasonable to argue that the claimed mixture of catalysts and the ratio in which they are present are nothing more than routine optimization. In the instant application, mixtures of a sodium compound and a potassium compound are disclosed as catalysts for the claimed process. The cited reference teaches a single hydroxide or alcoholate of an alkali or alkaline earth metal as a catalyst. Mixtures of sodium and potassium are not disclosed in the cited reference. Accordingly, the allegedly optimizable feature is not encompassed by the teachings of the cited reference. There is no teaching or suggestion to use catalyst mixtures as claimed. Furthermore, nothing in the cited reference recognizes particular alkali or alkaline earth metal mixtures as result-effective.

Finally, given the lack of any teaching or suggestion to use mixtures of catalyst compounds and the lack of any teaching or suggestion to use sodium and potassium specifically, combined with the lack of any suggestion as to the desirability of the modification suggested by the Examiner, one of ordinary skill in the art would have no reasonable expectation of success in altering the catalysts taught by the reference to include the claimed mixtures.

Appl. No.: 09/744,001  
Group Art Unit: 1625

Accordingly, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness, as none of the three criteria necessary to establish a *prima facie* case of obviousness has been satisfied. Thus, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §103(a).

In view of the remarks set forth above, Applicants submit that all pending claims satisfy the requirements of 35 U.S.C. §112 and patentably distinguish over the prior art of record and known to Applicants, either alone or in combination. Accordingly, reconsideration, withdrawal of the rejections and a Notice of Allowance for all pending claims are respectfully requested.

Respectfully submitted,

**ANSGAR BEHLER, et al.**

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(Date)

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ARE:are

Attachment: (2 pages) -- Webster's New International Dictionary of the English Language, 2<sup>nd</sup> Ed, p. 187, Merriam-Webster Publishing, Springfield, Mass (1941)

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**au-to-gen-e-al** (jēn'jē-āl), *adj.* Autogenous. *Rare.*  
**au-to-gen-e-sis** (jēn'jē-sis), *n.* [au-to + -genesis.] *Biol.*  
 Spontaneous generation.  
**au-to-gen-etic** (jēn'jē-tik), *adj.* 1. Self-generated.  
 2. *Biol.* Pertaining to autogenesis.  
 3. *Phys. Geog.* Pert. to, controlled by, or designating, a system of self-determined drainage.  
 — **au-to-gen-etic-al-ly** (jēn'jē-tik-ē-lē), *adv.*  
**autogenic drainage**. *Geol.* Drainage by streams whose courses have been determined by the conditions of the land surface over which they flow, independently of conditions upon any older, higher land surface. *CF. EPIGENETIC DRAINAGE.*  
**au-to-gen-ous** (ō-tō'jē-nūs), *adj.* [Gr. *autogenēs*. See *au-to*; -*genēs*.] 1. Self-generated; produced independently of external aid; endogenous.  
 2. *Anat.* Ossifying from an independent center.  
 3. *Med.* Of origin within oneself; as, *autogenous* infection.  
 4. *Phys. Geog.* Autogenetic.  
 5. *Welding.* Unitings metal surfaces by fusion without hammering and without the addition of metal.  
 6. *Zool.* Originating within the same individual.  
 — **au-to-gen-ous-ly**, *adv.*

**autogenous vaccine**. *Med.* A vaccine, consisting of a standardized suspension of killed or attenuated bacteria, which has been prepared from cultures obtained from a specific lesion of the patient himself and used to immunize him against further spread and progress of the same organism.  
**au-to-gen-y** (ō-tō'jē-nē), *n.* Self-generation.  
**au-to-graph** (ō-tō'grāf), *n.* [See *au-to*; -*graph*.] A trade-mark for a type of aircraft, the wings are supplemented by a system of rotating blades hinged at one end to a vertical adjustable shaft. In one form the lift is supplied by this system, and lateral and longitudinal inclination is controlled by the tilting of the adjustable shaft. Once aloft, the rotating system is no longer driven by the machine's power plant but by air forces alone; hence [sometimes not comp.] such an aircraft bearing this trade-mark. The forward motion is gained by a mechanically driven propeller.

**au-to-graph-ic** (ō-tō'grāf-ik), *adj.* [au-to + -graph-ic.] *Psychopathol.* Self-knowledge, esp. an understanding of one's own emotional conflicts; also, a psychotherapeutic method designed by the reviving of forgotten memories, to develop such self-understanding. — **au-to-graph-ic-al-ly** (ō-tō'grāf-ik-ē-lē), *adv.*  
**au-to-graph-ic** (ō-tō'grāf-ik), *n.* [au-to + -graph-ic.] *Surg.* & *Biol.* A tissue or organ which is transplanted from one part to another part of the same body; also, one restored to its original position after removal, as from injury. — *v. t.* To make an autograph of. — **au-to-graph-ic-ly**, *adv.*

**au-to-graph** (ō-tō'grāf), *n.* [L. *autographum*, neut. of *autographus* autographus, fr. Gr. *autographos*, fr. *autos* self + *graphein* to write.] 1. That which is written with one's own hand; an original, or author's own, manuscript; a person's own signature or handwriting.  
 2. A duplicate produced by autography.  
 3. An autographic recorder. See *AUTOGRAPHIC*, *adj.*, 3.

**au-to-graph** (ō-tō'grāf), *adj.* In the author's own handwriting; as, an *autograph* letter, an *autograph* will.  
**au-to-graph** (ō-tō'grāf), *v. t.* 1. To write with one's own hand.  
 2. To write on or copy by autography, as a picture.  
**au-to-graph-er** (ō-tō'grāf-ēr), *n.* A collector of autographs.  
**au-to-graph-ic** (ō-tō'grāf-ik), *adj.* 1. Pertaining to, or of the nature of, an autograph.  
 2. Pertaining to, or used in, the process of autography.

**3. Mach.** Of an instrument, self-recording; of a record, recorded by such an instrument.  
**au-to-graph-ic-al-ly**, *adv.*  
**au-to-graph-ism** (ō-tō'grāf-iz-m), *n.* *Med.* Dermographia.  
**au-to-graph-ist** (ō-tō'grāf-ist), *n.* One affected with dermatographia.  
**au-to-graph-ism-e-ter** (ō-tō'grāf-iz-m-ēr), *n.* [See *AUTOGRAPHIC*; -*meter*.] *Surg.* An instrument on wheels for automatically recording the topography of places over which it travels.

**au-to-graph-y** (ō-tō'grāf-ē), *n.* 1. Writing with one's own hand; a person's own handwriting; an autograph, or collection of autographs.  
 2. A process in lithography by which a writing or drawing is transferred from paper to stone (or zinc).  
**au-to-gra-vure** (ō-tō'grā-vūr; -grāvūr; 242), *n.* [au-to + *photogravure*.] A process, employing a silk stencil, for producing designs in colors, either by hand or photographically; also, a print so made.

**au-to-harp** (ō-tō'hārp), *n.* [au-to + -harp.] A trade-mark for a zitherlike musical instrument provided with dampers which, when depressed, deaden some strings, leaving free others that form a chord; hence [sometimes not comp.] the instrument bearing this trade-mark.

**au-to-head-er** (ō-tō'hēd-ēr), *n.* *Aplic. Mach.* A header with an engine that propels the machine and drives all its mechanisms.  
**au-to-hem-or-rhage** (ō-tō'hēm-ō-rhāj), *n.* [au-to + *hemorrhage*.] *Zool.* In certain insects, the voluntary exudation, or ejection through a rupture of the skin, of blood which is nauseous or poisonous and hence protective against enemies.

**au-to-i-cous** (ō-tō'ī-kūs), *adj.* [au-to + Gr. *ikos* dwelling.] *Biol.* Autocuous. *Autocuous* is preferred by bryologists.  
**au-to-ig-ni-tion** (ō-tō'ī-gn-ē-shēn), *n.* [See *AUTO*.] A self-ignition, either as a result of the heat of the compression alone or from this in combination with glowing carbon.

**au-to-imm-un-i-za-tion** (ō-tō'īm-ūn-ē-zā-shēn; -zā'īm-ūn-ē-zā-shēn), *n.* [au-to + *immunization*.] *Med.* A immunization produced by natural means within the body. *b* Immunization protecting the body against its own tissues or their products.  
**au-to-in-fec-tion** (ō-tō'ī-fek-shēn), *n.* [au-to + *infection*.] *Med.* Development of microbic disease having an origin within the body.

**au-to-in-fec-ti-ble** (ō-tō'ī-fek-ti-bēl), *adj.* *Med.* Capable of being transmitted by inoculation from one part of the body to another, as certain kinds of warts.

**au-to-mat-ic** (ō-tō'mat-ik), *adj.* [au-to + -mat-ic.] *Automat.* Automatic.  
**au-to-mat-ic-al-ly** (ō-tō'mat-ik-ē-lē), *adv.* Automatically.  
**au-to-mat-ic-ism** (ō-tō'mat-ik-iz-m), *n.* Automaticism.

**au-to-mat-ic** (ō-tō'mat-ik), *n.* [au-to + -mat-ic.] A machine or apparatus which operates automatically; esp., an automatic firearm.  
**au-to-mat-ic-al** (ō-tō'mat-ik-ē-lē), *adj.* Automatic; of or pertaining to that which is automatic.  
**au-to-mat-ic-al-ly**, *adv.* Automatically.  
**au-to-mat-ic** (ō-tō'mat-ik), *n.* A kind of self-acting railroad signal, operated by a moving train by means of electricity or a combination of electricity and compressed air.

**au-to-mat-ic** (ō-tō'mat-ik), *n.* An elastic currency which adapts itself to business needs with little government intervention.  
**au-to-mat-ic** (ō-tō'mat-ik), *n.* A portable drilling device operated by power, usually electricity. It consists of a spirally fluted rod having a drill chuck attached to one end, a hand knob on the other, and a driving knob between the two. A straight brace for bits, the shank of which consists of a screw (usually having four distinct threads) of very coarse pitch sliding within a correspondingly threaded tube having a handle at the end, the tool being actuated by pushing the handle.  
**au-to-mat-ic** (ō-tō'mat-ik), *n.* A firearm which, after the first round is expended, by gas pressure or force of recoil automatically extracts and ejects the empty case, loads another round into the chamber, fires, and repeats the above cycle, until the ammunition in the feeding mechanism is exhausted, or pressure on the trigger is released. *CF. SEMI-AUTOMATIC GUN.*  
**au-to-mat-ic** (ō-tō'mat-ik), *n.* An electric iron containing a thermostat to break or make the circuit.

**au-to-mat-ic** (ō-tō'mat-ik), *n.* An automobilist. *Colloq.*  
**au-to-mat-ic** (ō-tō'mat-ik), *n.* [au-to + -mat-ic.] *Physiol.* Voluntary movement.  
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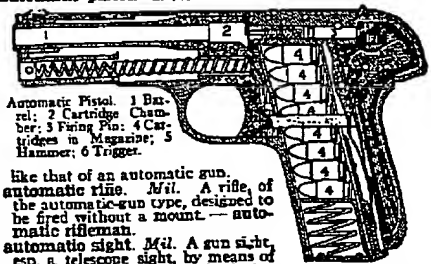
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**Automatic Pistol.** 1. Barrel; 2. Cartridge Chamber; 3. Firing Pin; 4. Cartridges in Magazine; 5. Hammer; 6. Trigger.  
 Like that of an automatic gun.  
**automatic rifle.** *Mil.* A rifle of the automatic-gun type, designed to be fired without a mount. — *automatic rifleman.*  
**automatic sight.** *Mil.* A gun sight, esp. a telescope sight, by means of which the alignment of the laying points or telescope on the object to be hit brings the gun into the proper position as to elevation and direction.  
**automatic sprinkler.** See *SPRINKLER SYSTEM*.  
**automatic stability.** See *STABILITY*, 7.  
**automatic stop.** *Railroads.* A mechanical device which applies brakes, or cuts off power, if a car passes a danger signal.

**automatic switch.** See *SWITCH*, *n.*  
**automatic tapping chuck.** *Mach.* See *6th* *CHUCK*, 5.  
**automated telegraph.** A telegraph in which the sending or the receiving instruments are automatic.  
**automatic trip.** *Elec.* A device that, under certain conditions, automatically opens or trips a circuit.

**au-tom-a-tic** (ō-tōm'ā-tik), *n.* [au-tom-a-t-ic + -ic.] *Biochem.* A hormone which stimulates the heartbeat.  
**au-tom-a-tism** (ō-tōm'ā-tiz-m), *n.* 1. State or quality of being automatic; also, automatic action.  
 2. *Philos.* The theory that consciousness does not control action, but is a mere adjunct of physiological changes.  
 3. *Physiol.* The power or fact of movement (1) independently of external stimuli, as the beating of the heart, or (2) directly from the effect of external stimuli but independent of conscious control.

**4. Psychol.** Any action performed without the doer's intention or knowledge.  
 The educated and practiced speaker concentrates his attention on the subject of his exposition and trusts to acquired *automaticity* for its expression. *Henry Reed.*  
**au-tom-a-tist** (ō-tōm'ā-tist), *n.* 1. *Philos.* A believer in automatism.  
 2. One who does automatic writing or other automatic (in sense 4) acts; specif., a spiritualistic medium.  
 — **au-tom-a-tist**, *adj.*

**au-tom-a-ti-zā-tion** (ō-tōm'ā-tī-zā-shēn; -tī-zā'zā-shēn), *n.* The act or process of automatizing anything; state of being automatized.  
**au-tom-a-tize** (ō-tōm'ā-tīz), *v. t.* [F. *automatiser*.] 1. To make an automation of.  
 2. To render automatic; to reduce, as a habitual action, to an automatic condition; — used chiefly in past participle.  
**au-tom-a-tic** (ō-tōm'ā-tik), *adj.* 1. Automatic. A combining form, Greek *automato-*, *automat-*, from *automatos* self-moving, self-acting, denoting automatic, as in *automatograph*.  
**au-to-mat-ic-graph** (ō-tō'mat-ik'grāf; 83), *n.* [au-tom-a-t-ic + -graph.] A contrivance to be used in automatic hand movements, as in planigraphy.

**au-to-mat-ic-ton** (ō-tō'mat-ik-tōn), *n.* *pl.* -*tons* (-tōnz). [Gr. neut. of *automatos* self-acting, fr. *autos* self + *matō* meaning to think; akin to *Skr. matā* thought, and to